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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Frank H. Levinson

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EXAMINER

WANG, QUAN ZHEN

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/735,710	Applicant(s) LEVINSON ET AL.	
	Examiner Quan-Zhen Wang	Art Unit 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 21,22 and 34-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,10,13-15,19,20,23,24,26,29,30 and 31 is/are rejected.
- 7) ☒ Claim(s) 2-9,11,12,16-18,25,27,28,32 and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/29/01, 1/15/02, 10.</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Invention 1, claims 1-20 and 23-33 for examination in the reply filed on October 25, 2005 is acknowledged.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "supplemental channel circuitry includes an RF data sampler for sampling data from the first data stream to generate a set of sampled RF data and circuitry for including the sampled RF data in the second data stream" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

Art Unit: 2633

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 13 and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 13 recites: "... the supplemental channel circuitry includes an RF data sampler for sampling data from the first data stream to generate a set of sampled RF data and circuitry for including the sampled RF data in the second data stream". However, the instant specification does not describe the claimed invention in such a way as to enable one skilled in the art to make of use the claimed invention.

Claim 29 recites: "... sampling data from the first data stream to generate a set of sampled RF data and including the sampled RF data in the second data stream". However,

Art Unit: 2633

the instant specification does not describe the claimed invention in such a way as to enable one skilled in the art to make of use the claimed invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 10, 14-15, 19-20, 23-24, 26, 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Admitted Prior Art (APA) in view of Bigam et al. (U.S. Patent US 5,684,799).

Regarding claims 1, 15, 19, 23, and 31, the APA discloses a return path transmitter (fig. 2) for use in conjunction with a local system that generates an analog RF data signal to be conveyed to a head end system, the return path transmitter comprising: a sample clock generator (fig. 2, clock generator 156) for generating a sample clock; an RF signal receiver (fig. 2, RF-receiver RF), coupled to the sample clock generator, for receiving and converting the analog RF data signal into a first data stream of digitized RF data samples at a rate determined by the sample clock; and an optical transmitter (fig. 2, optical transmitter 158 and 159) for converting the serialized RF data stream into a serialized optical data signal for transmission over an optical fiber. The APA differs from the claimed invention in that APA does not specifically that the system further comprising supplemental channel circuitry for providing a second

Art Unit: 2633

data stream; a multiplexer coupled to the RF signal receiver and the supplemental channel circuitry to receive the first data stream and second data stream and to output a combined data stream. However, it is well known in the art to have a supplemental circuitry for providing a second data stream and use a multiplexer coupled to the RF signal receiver and the supplemental channel circuitry to receive the first data stream and second data stream and to output a combined data stream. For example, Bigham discloses a transmitter system (fig. 2) comprising a supplemental circuitry for providing a second data stream (fig. 2, for example, PAC data 136') and a multiplexer (fig. 2, RF combiner 144) to output a combined data stream (fig. 2, output data stream to e/o converter 154). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to incorporate a supplemental circuitry for providing a second data stream and use a multiplexer coupled to the RF signal receiver and the supplemental channel circuitry to receive the first data stream and second data stream and to output a combined data stream, as it is taught by Bigham, in the system of the APA in order to provide efficient transport of signaling traffic and interactive data.

Regarding claims 10 and 24, Bigham further teaches to transmit maintenance data (control data) (column 7, lines 23-27).

Regarding claims 14 and 30, Bigham further teaches that the supplemental channel circuitry is configured to generate the second data stream intermittently; the optical transmitter includes circuitry for inserting padding words into the combined data stream so as to maintain the combined data stream at a fixed data rate (fixed length and format) (column 10, lines 44-47).

Regarding claim 26, Bigham further teaches receiving a third data stream (fig. 2, data stream 136) from a source (fig. 2, data source BCS 100) external to the return path transmitter, the third data stream having a data rate of at least 5 Mb/s (fig. 2, 45MB/s); and merging the first and third data streams into a merged data stream; wherein the combining includes combining the merged data stream and second data stream to generate the combined data stream (fig. 2, RF combiner 144).

Allowable Subject Matter

7. Claims 2-4, 5-9, 11-12, 16-18, 25, 27-28, and 32-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ghaibeh et al. (U.S. Patent US 5,926,478) teach a point-to-multipoint optical network for data transmission. Dapper et al. (U.S. Patent US 6,535,715 B2) disclose a hybrid/fiber coax video and telephony communication system with poly-phase filtering.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan-Zhen Wang whose telephone number is (571)

Art Unit: 2633

272-3114. The examiner can normally be reached on 9:00 AM - 5:00 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

qzw
12/22/2005


AGUSTIN BELLO
PRIMARY EXAMINER